

ABSTRACT OF THE DISCLOSURE

Porcine circovirus-2 (PCV-2) is a recently identified agent wherein the potential spectrum of PCV-2-associated disease has been expanded by evidence of vertical and sexual transmission and associated reproductive failure in swine populations. PCV-2 was isolated from a litter of aborted piglets from a farm experiencing late term abortions and stillbirths. Severe, diffuse myocarditis was present in one piglet associated with extensive immunohistochemical staining for PCV-2 antigen. Variable amounts of PCV-2 antigen were also present in liver, lung and kidney of multiple fetuses. Inoculation of female pigs with a composition including an immunogen from PCV-2 or an epitope of interest from such an immunogen or with a vector expressing such an immunogen or epitope of interest prior to breeding, such as within the first five weeks of life, or prior to the perinatal period, or repeatedly over a lifetime, or during pregnancy, such as between the 6th and 8th and/or the 10th and 13th weeks of gestation, can lower viral titer, prevent myocarditis, abortion and intrauterine infection associated with porcine circovirus-2. In addition, innoculation of male and/or female pigs with the aforementioned compositions can be carried out to prevent transmission of PCV-2 from male to female (or *vice versa*) during mating. Thus, the invention involves methods and compositions for preventing myocarditis, abortion and intrauterine infection associated with porcine circovirus-2.